MAKING THE TRANSITION TO HEMP

ColorPoint and AgTech Scientific used existing greenhouse infrastructure and a flexible team to transition to hemp production.

BY JANE VANWINGERDEN

"We are witnessing history right now," a ColorPoint co-worker whispered to another with excited anticipation as they watched the shovels dig into the Kentucky soil. The 2018 Hemp Bill passed and AgTech Scientific was breaking ground on a new hemp extraction and processing facility. All of Bourbon County was excited, but the ones with the highest anticipation were the local farmers enlisted to grow the hemp and ColorPoint, the growers responsible for providing clones and cuttings to said farmers. Everyone was in this together!

ColorPoint was the 8th largest greenhouse in the United States growing annual bedding plants and ornamentals for big box retailers. When AgTech Scientific approached the company about growing hemp clones and liners during the "off-season," the opportunity made a lot of sense. Wasted greenhouse space during the summer months would be put to good use.

IN THE BEGINNING ...

In the early stages, roughly 25 to 30% of the greenhouse was filled with hemp while the other 70% was still ornamentals. From a growing perspective, the biggest difference in growing ornamentals to hemp was recognizing that hemp had to be regarded as a consumable.

Pesticides and fungicides could not be used, so we adjusted our current clean growing practices and used organic materials. There was a major boost in our biocontrol program, IPM (integrated pest management). It went from predominantly chemical-based with some biologicals to predominantly bio-based with some organic chemicals.

Our first hemp cuttings came from other greenhouses and breeders, but now we grow everything ourselves in-house including the stock/mother plants, cuttings and liners. While everything was certainly learned on the fly, we weren't unprepared or going on a whim and hoping for the best; growing hemp was thoroughly researched by our growing team.

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THE RIGHT MINDSET

The grower's internal mindset regarding growing in general had to change in what they were looking for. The end goal for ornamentals is to grow product to its specifications: the right size and amount of color for its pre-determined ship week, but the end goal for hemp is to figure out a way to get the most cannabidiol (CBD) per acre of biomass.

Before too long, the decision was made to transition completely from horticulture to monoculture, namely, hemp. Customers and vendors were contacted so we could finish our spring season commitments and phase out of annuals by mum season. We were already growing our own clones and cuttings, so in place of sticking mums, we started sticking hemp in the very pots our mums would have been in!

Plans were laid out enough where we knew what it was going to take to do this, and current employees' roles/jobs were changed or adjusted. Having everyone on board and willing to do what it takes is key. No matter what you do, it takes good people to get the job done. We had good people, but in some cases, we didn't know yet where they were going to fit in with all the changes taking place. Yet their flexibility and willingness to adapt was amazing. Not every company is blessed with a team like ours.

A NEW "PROCESS"

Growing the product had been well planned and harvest was about to begin, but processing the biomass had not been discussed. "Processing" is a one-word definition for a complex four stage process: unloading the hemp off the semi-trailers, drying the hemp plants, stripping the leaves and buds from the plants, and milling the hemp biomass.

AgTech Scientific repurposed shipping racks to dry hemp using tobacco sticks and move product more efficiently.
Photo: AgTech Scientific

The original expectation was to use AgTech's new processing facility, however, construction was taking longer than anticipated to complete and the building would not be done in time. With time ticking by, we locked down the decision to process in the greenhouse and immediate action was taken to move forward in processing the biomass using ColorPoint's current infrastructure.

Not only did the greenhouse contain approximately 30 acres of hemp, the outdoor farmers' fields totaled over 1,800 acres of hemp, all of which needed to be processed within seven weeks! If not, THC and CBD levels could be affected, ruining the crop. Efficiency is essential to accomplish a task of this nature, and through careful planning and calculation we were ready to execute.

We converted one of our existing barns into a drying room complete with drop panels, heaters, vents and overhead doors. We learned from one of the farmers to use tobacco sticks to hang hemp stalks on our existing shipping racks. This not only aided in drying, but nearly doubled our speed in unloading the trailers of hemp from the outdoor fields.

Once the hemp was dry enough to strip, it was moved to the "stripping room," formally another existing barn in the greenhouse. Here, a line of employees hand stripped (the most efficient way to strip) the stalks of hemp. Milling presented some of its own challenges due to the stickiness of the hemp. Every hour the mill needed to be taken apart and thoroughly cleaned.

Harvest, or more accurately, processing, took a long and arduous seven weeks. We operated two shifts each at 10 hours a day, six-and-a-half days a week.

Ultimately, we were prepared. We got the greenhouse ready fully knowing how crazy things were going to be. We thought through every scenario and planned accordingly. We tested the best way to load the trucks at the outdoor farms and then unload at the greenhouse to be the most efficient. We had plan A, B and even C. We had to be flexible and recognize when something wasn't working and quickly adjust. Pulling off the monumental task of growing, harvesting and processing over 1,800+ acres of hemp (resulting in nearly 3 million pounds of biomass) was not the result of a crazy whim, or because of an innovative facility, but due to careful planning and a team of leaders willing to take on the challenge. **HPN**

Jane VanWingerden is the former AgTech Scientific marketing manager and team member. For more information please visit www.agtechscientific.com.